Delaware Recognized for Efforts in Better Buildings Challenge

DOVER — Delaware became one of just five state governments recognized by the U.S. Department of Energy for its leadership in the first year of the Better Buildings Challenge.

Launched by President Obama in December 2011, the Better Buildings Challenge is a national leadership initiative that calls on chief executive officers, university presidents and state and local leaders to reduce their portfolio-wide energy use 20 percent by 2020 and then share the results of their energy reduction strategies.

"Since joining the Better Buildings Challenge, we've worked hard to find innovative ways to reduce energy consumption in state buildings," said Governor Jack Markell. "By taking simple steps, like replacing hundreds of incandescent light bulbs with energy-saving alternatives, we've achieved real progress in reducing the energy consumption of state government."

On average, Better Buildings Challenge partners reduced their energy intensity by 2.5 percent in the first year of the initiative. Delaware reduced its energy intensity by 5 percent.

Overall, the State has introduced 12 energy conservation measures (ECMs) at its showcase project, the Carvel State Office Building, ranging from water and lighting improvements to heavy mechanical equipment such as HVAC improvements. Most of these measures have already been completed while others are nearing completion.

Outlined below are some of the energy efficiency initiatives

implemented at the Carvel State Office Building:

- Energy efficient lighting for 3,000 bulbs (Completed in April 2012);
- Lighting controls, including installing 400 occupancy sensors (Completed in May 2012);
- Cooling tower optimization (Completed in October 2012);
- Premium efficiency motor installation for eight motors (Completed in September 2012);
- Insulated hot water piping (Completed in 2011);
- ENERGY STAR transformers to replace seven standard models (Completed in February 2013);
- Heat pump replacement of 613 original perimeter pumps;
- Roof-mounted 10kW photovoltaic system, expanding existing system for a total of 20kW (Installed in 2012 and going live in fall 2013); and
- Water Conservation, including 55 bathroom aerators (Completed in September 2012).

In addition to the Carvel State Office Building, many other State of Delaware facilities are also undergoing energy improvements as part of the Better Buildings Challenge. A sampling of some of these locations and projects is below.

- Sussex County Courthouse -14% weather-normalized energy use reduction since joining the Challenge (45% cumulative reduction from 2008 baseline)
- o Improvements include: energy efficient lighting; lighting controls and sensors; building automation system upgrade; electrostatic air filters; boiler replacement with high efficiency gas model; and a high efficiency chiller.
- Sussex Correctional Institution 18% weather-normalized energy use reduction since joining the Challenge (24% cumulative reduction from 2008 baseline)
- o Improvements include: demand control ventilation; energy management system upgrade; high efficiency ice machines; water conservation; energy efficient lighting; programmable

thermostats; ozone laundry system; and heating system conversion from propane to natural gas.

- James Williams State Service Center 10% weather-normalized energy use reduction since joining the Challenge (51% cumulative reduction from 2008 baseline)
- o Improvements include: building automation system upgrade; energy efficient lighting; HVAC reconfiguration; night and weekend setback schedule; window replacements; water conservation; and solar heat reflective window film.

To date, more than 110 organizations representing more than two billion square feet of space have joined the Better Buildings Challenge and committed to share portfolio-wide energy consumption data, publicize their cutting-edge showcase projects that demonstrate significant energy savings and to share their approaches to overcoming barriers with the marketplace.

"Through the Better Buildings Challenge, our Partners are breaking through barriers to reducing energy intensity and achieving lasting results that save money and create jobs," said David Danielson, Assistant Secretary for Energy Efficiency and Renewable Energy at the U.S. Department of Energy. "We applaud these Partners for their leadership in making their organizations more energy efficient which keeps American businesses competitive and communities prosperous."

For more information on Delaware's activities and accomplishments in the Better Buildings Challenge, visit http://www4.eere.energy.gov/challenge/partners/better-buildings/state-of-delaware.